



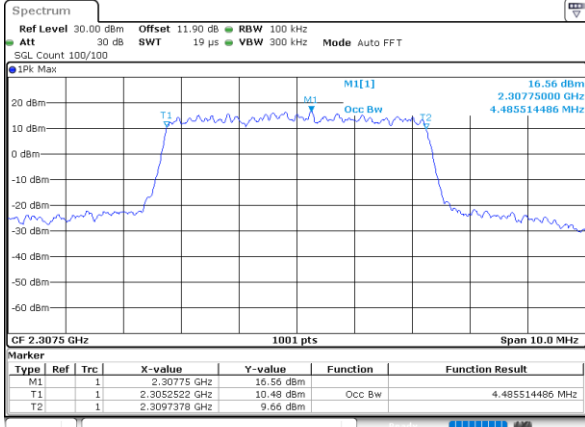
**Occupied Bandwidth**

Mode	LTE Band 30 : 99%OBW(MHz)											
BW	-		-		5MHz		10MHz		-		-	
Mod.	-	-	-	-	QPSK	16QAM	QPSK	16QAM	-	-	-	-
Lowest CH	-	-	-	-	4.49	4.50	-	-	-	-	-	-
Middle CH	-	-	-	-	4.48	4.48	9.01	9.01	-	-	-	-
Highest CH	-	-	-	-	4.49	4.49	-	-	-	-	-	-
Mode	LTE Band 26 : 99%OBW(MHz)											
BW	-		-		5MHz		10MHz		-		-	
Mod.	-	-	-	-	64QAM	256 QAM	64QAM	256 QAM	-	-	-	-
Lowest CH	-	-	-	-	4.50	4.49	-	-	-	-	-	-
Middle CH	-	-	-	-	4.48	4.49	9.01	9.01	-	-	-	-
Highest CH	-	-	-	-	4.50	4.48	-	-	-	-	-	-



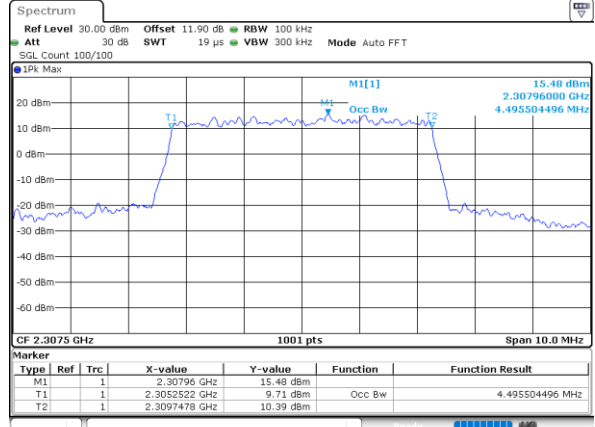
LTE Band 30

Lowest Channel / 5MHz / QPSK



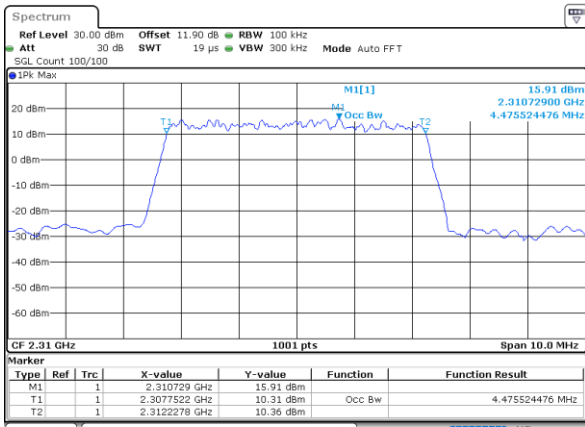
Date: 25\_SEP.2020 16:53:16

Lowest Channel / 5MHz / 16QAM



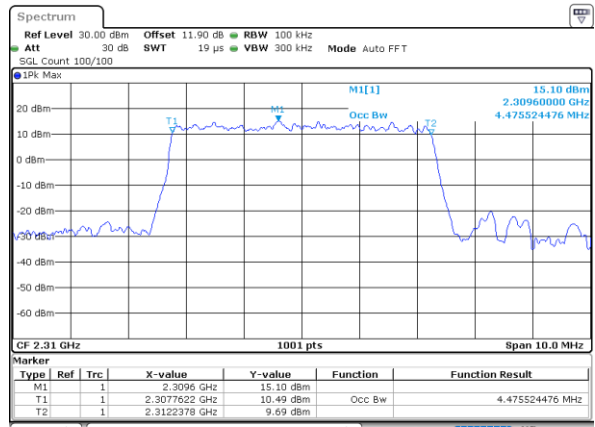
Date: 25\_SEP.2020 16:54:08

Middle Channel / 5MHz / QPSK



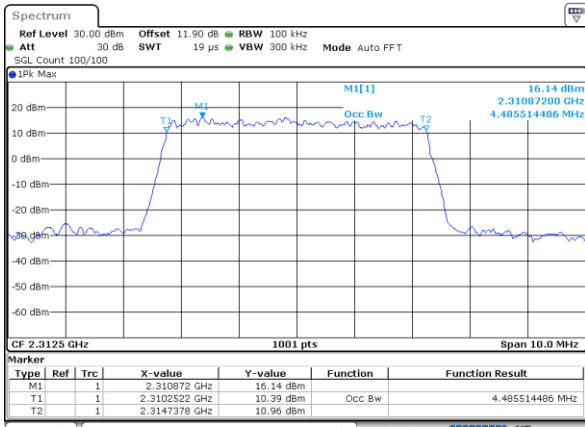
Date: 25\_SEP.2020 16:54:43

Middle Channel / 5MHz / 16QAM



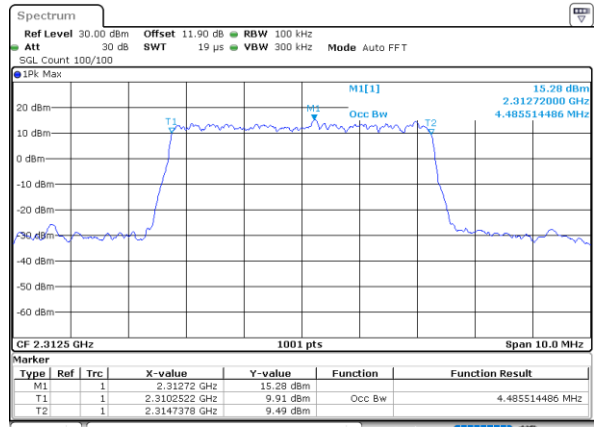
Date: 25\_SEP.2020 16:54:54

Highest Channel / 5MHz / QPSK



Date: 25\_SEP.2020 16:55:28

Highest Channel / 5MHz / 16QAM

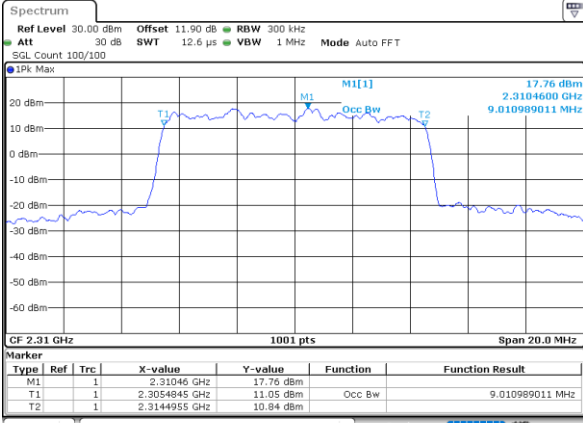


Date: 25\_SEP.2020 16:55:40



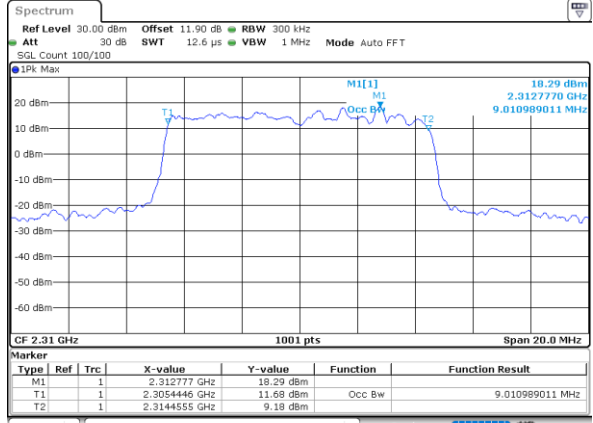
LTE Band 30

Middle Channel / 10MHz / QPSK



Date: 25\_SEP.2020 16:56:16

Middle Channel / 10MHz / 16QAM

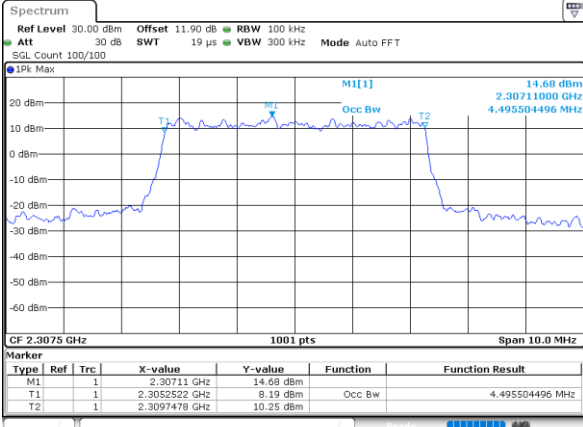


Date: 25\_SEP.2020 16:56:27



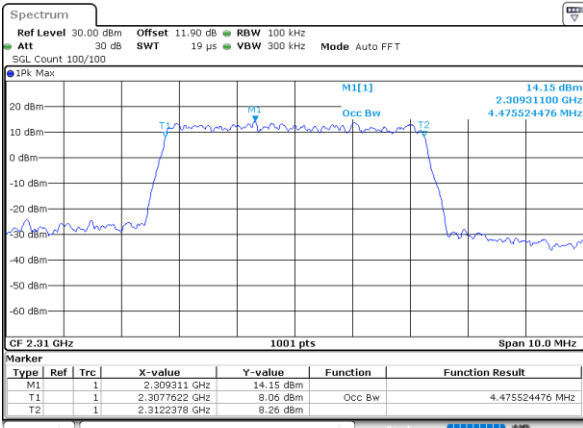
LTE Band 30

Lowest Channel / 5MHz / 64QAM



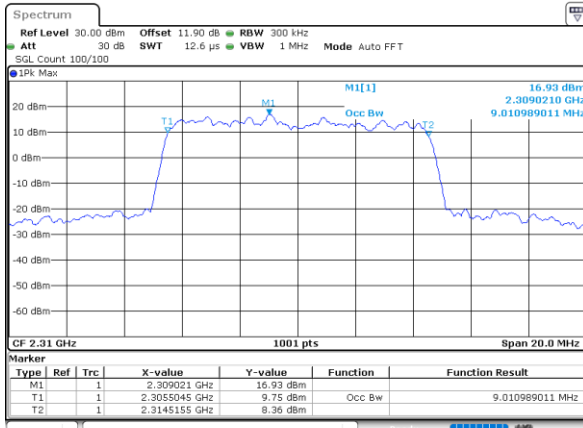
Date: 25\_SEP.2020 16:57:01

Middle Channel / 5MHz / 64QAM



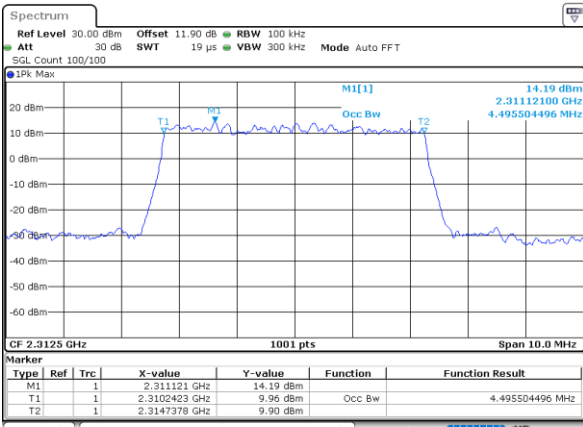
Date: 25\_SEP.2020 16:57:25

Middle Channel / 10MHz / 64QAM



Date: 25\_SEP.2020 16:58:11

Highest Channel / 5MHz / 64QAM

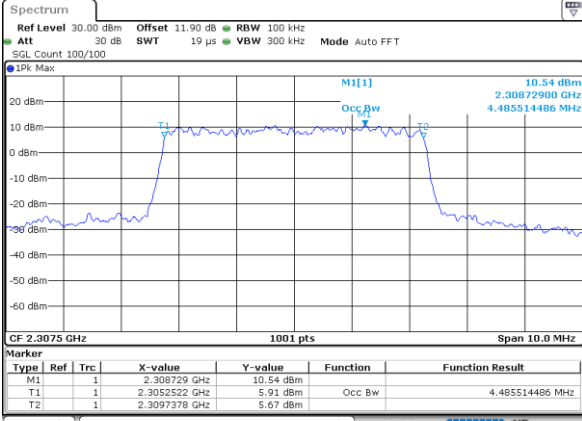


Date: 25\_SEP.2020 16:57:47



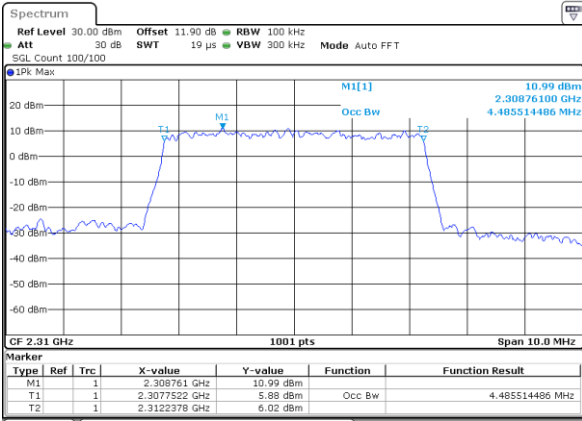
LTE Band 30

Lowest Channel / 5MHz / 256QAM



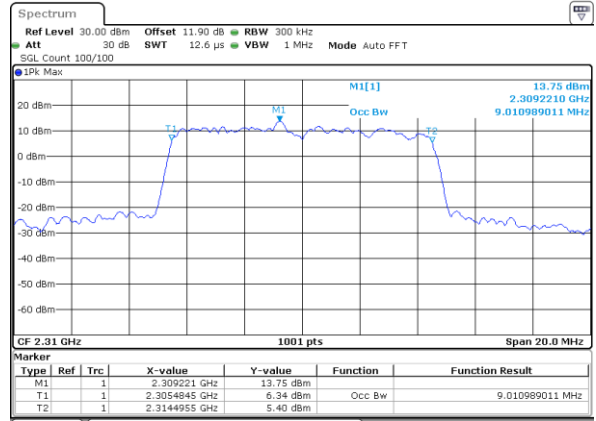
Date: 28\_SEP.2020 15:44:41

Middle Channel / 5MHz / 256QAM



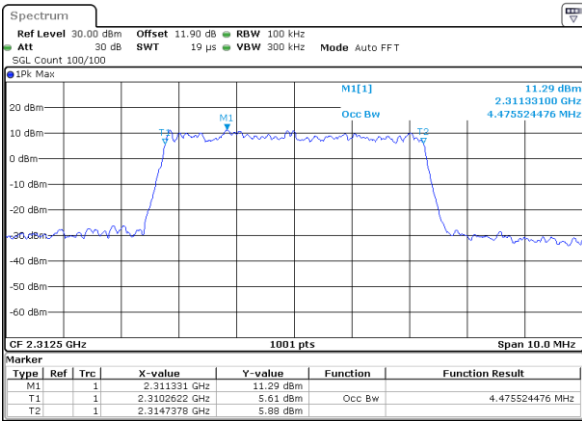
Date: 28\_SEP.2020 15:13:56

Middle Channel / 10MHz / 256QAM



Date: 28\_SEP.2020 15:50:39

Highest Channel / 5MHz / 256QAM



Date: 28\_SEP.2020 15:47:28

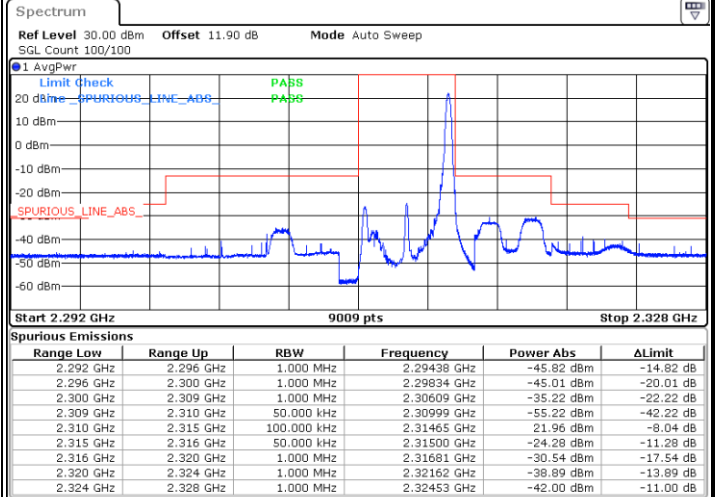
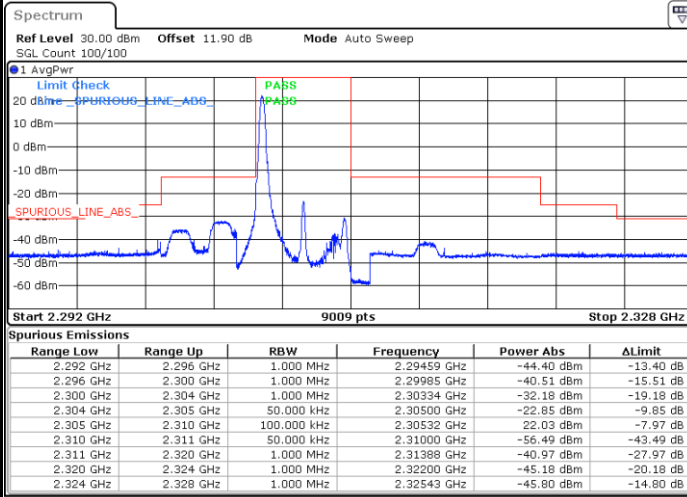


# Conducted Band Edge

## LTE Band 30 / 5MHz / QPSK

### Lowest Band Edge / 1 RB

### Highest Band Edge / 1 RB

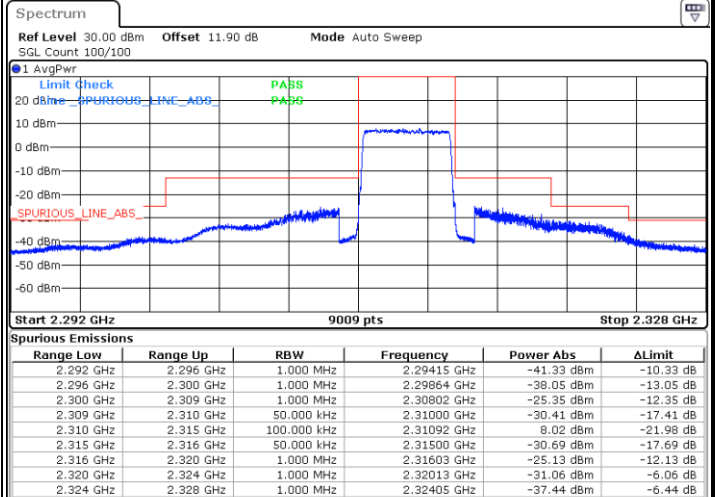
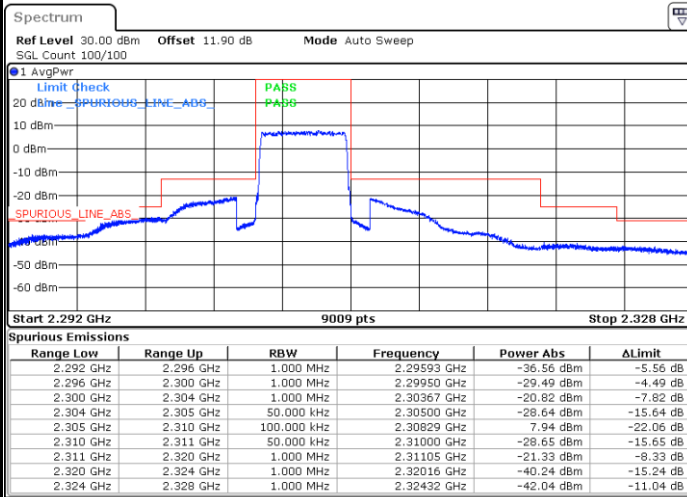


Date: 25.SEP.2020 16:33:12

Date: 25.SEP.2020 16:36:17

### Lowest Band Edge / Full RB

### Highest Band Edge / Full RB



Date: 25.SEP.2020 16:34:45

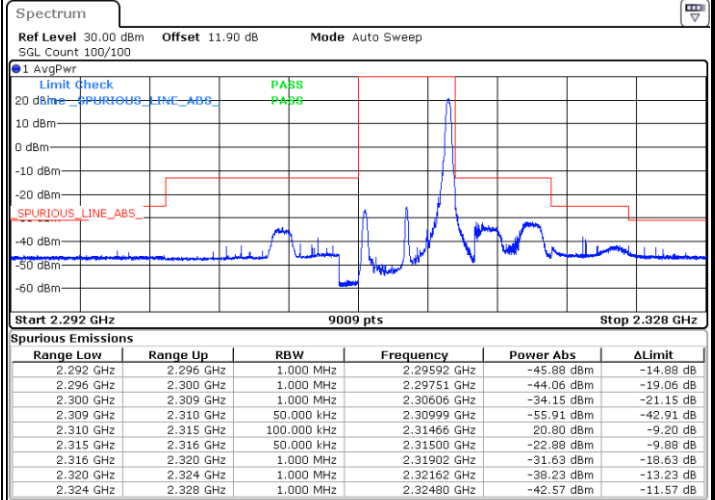
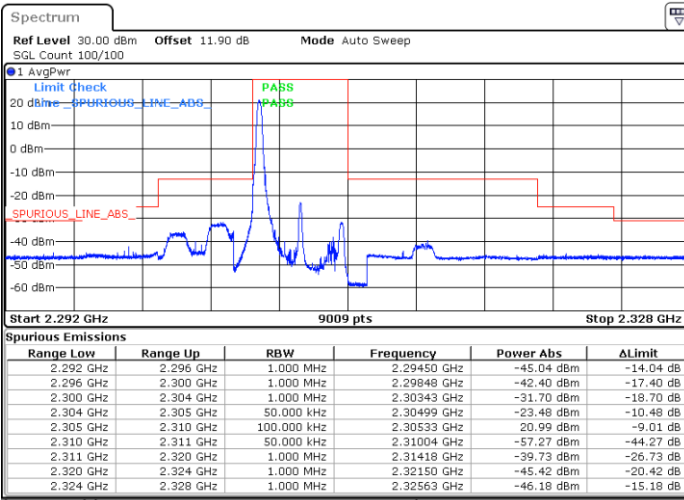
Date: 25.SEP.2020 16:37:49



LTE Band 30 / 5MHz / 16QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB

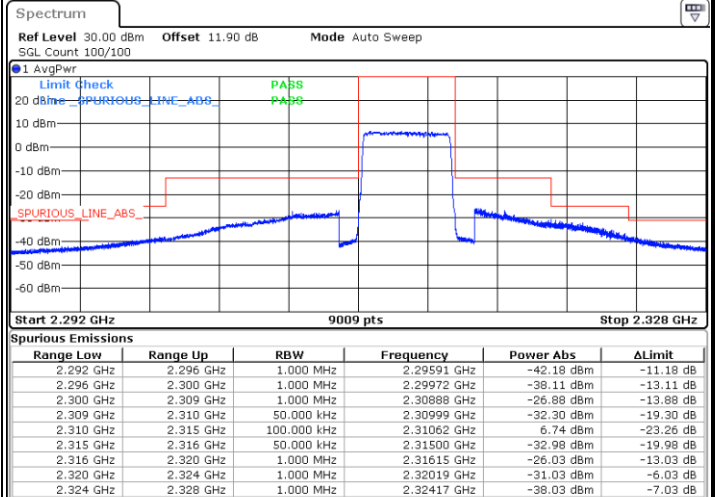
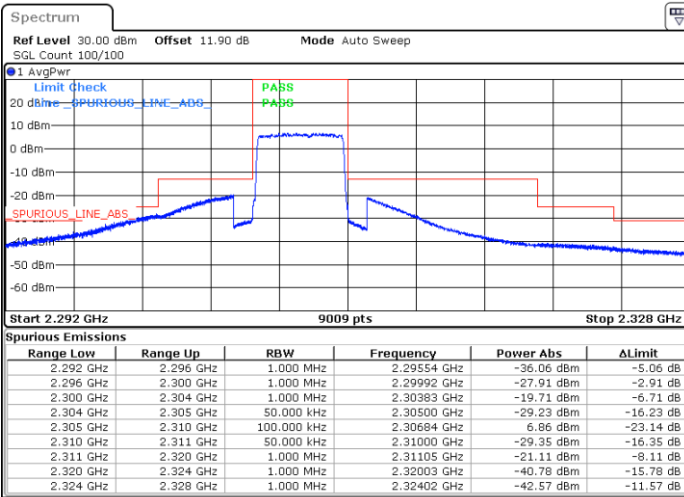


Date: 25\_SEP.2020 16:33:43

Date: 25\_SEP.2020 16:36:48

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



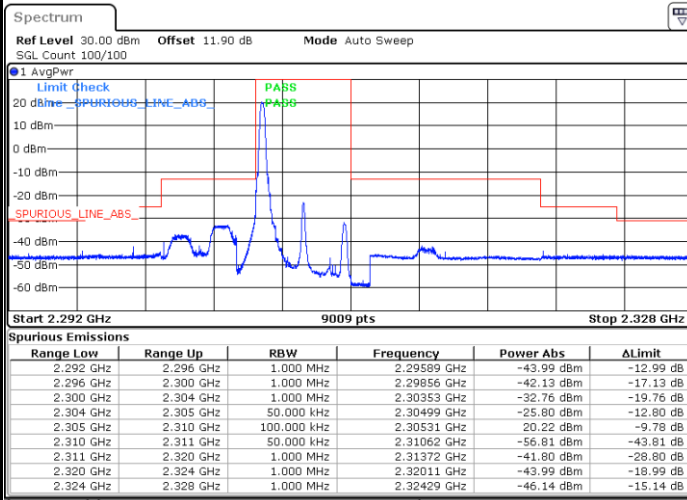
Date: 25\_SEP.2020 16:35:15

Date: 25\_SEP.2020 16:38:19



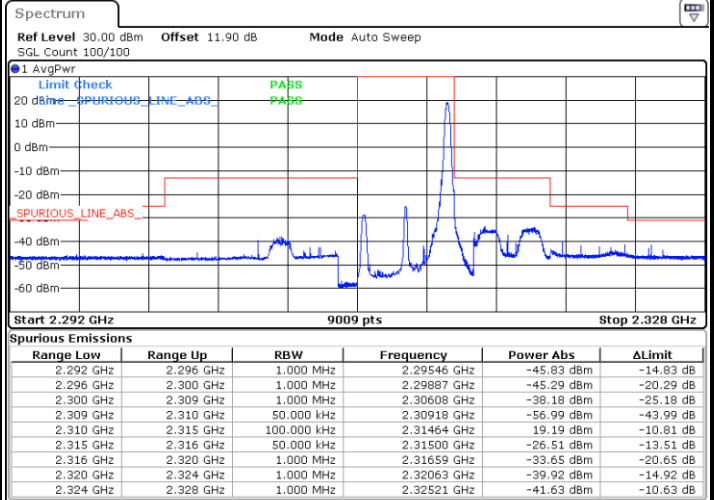
LTE Band 30 / 5MHz / 64QAM

Lowest Band Edge / 1RB



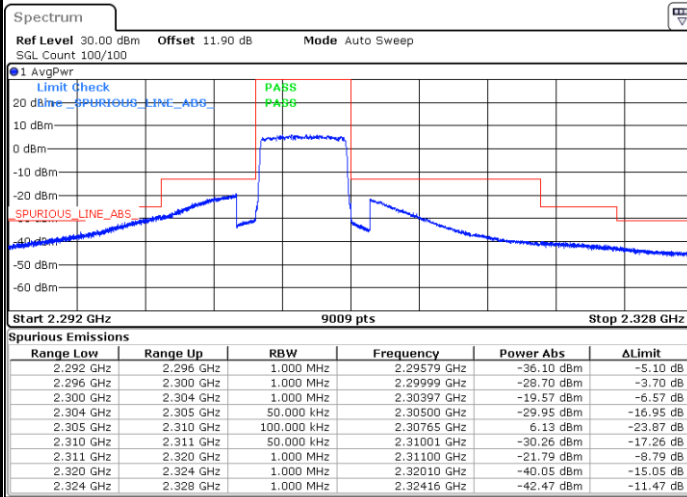
Date: 25\_SEP.2020 16:34:14

Highest Band Edge / 1 RB



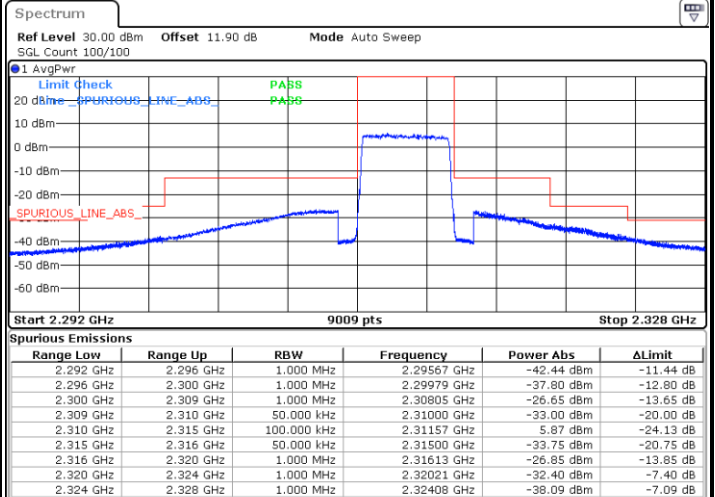
Date: 25\_SEP.2020 16:37:18

Lowest Band Edge / Full RB



Date: 25\_SEP.2020 16:35:16

Highest Band Edge / Full RB



Date: 25\_SEP.2020 16:38:50

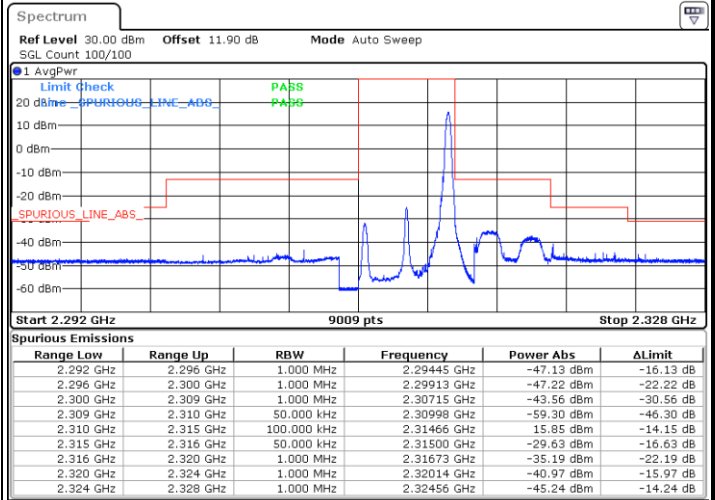
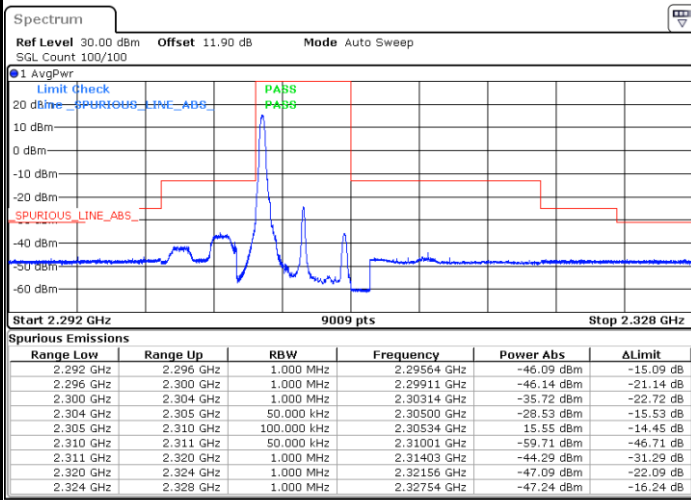




LTE Band 30 / 5MHz / 256QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB

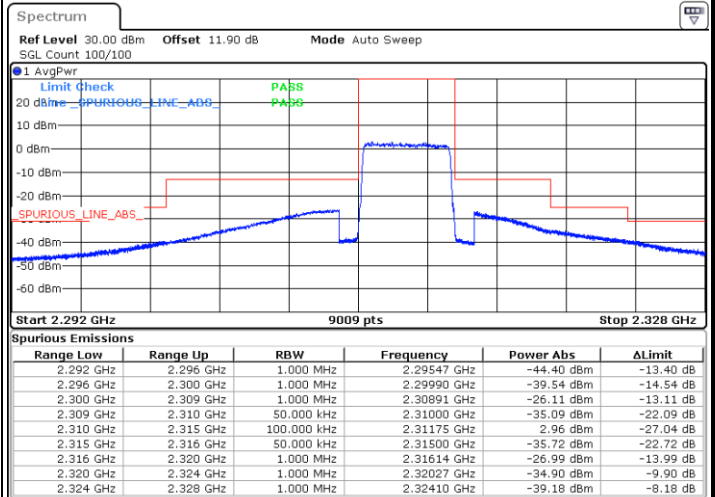
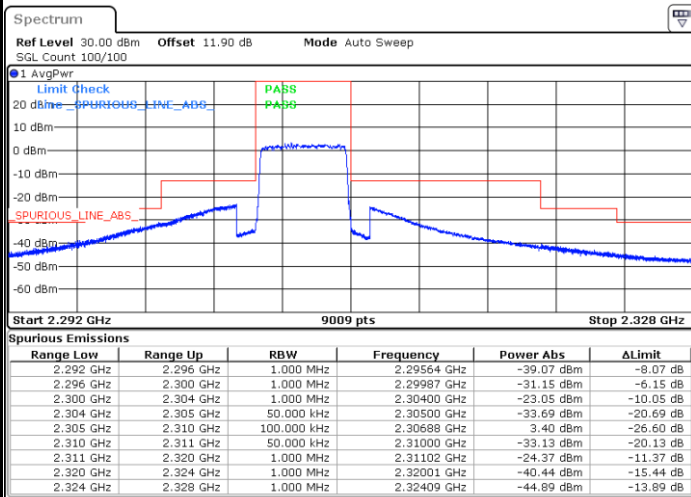


Date: 28.SEP.2020 15:45:48

Date: 28.SEP.2020 15:50:04

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 28.SEP.2020 15:45:17

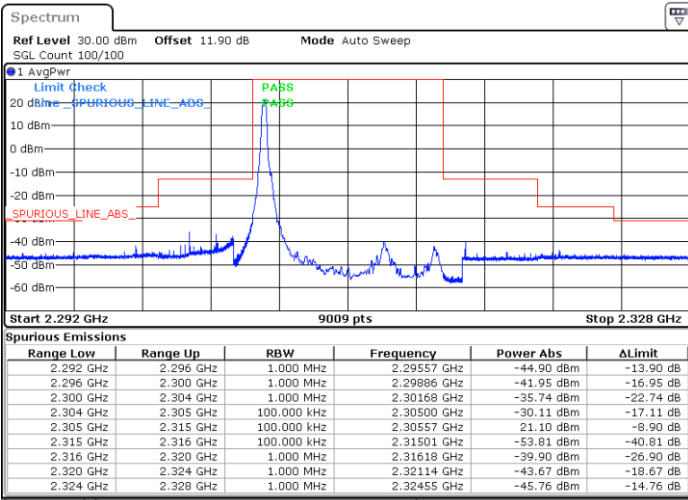
Date: 28.SEP.2020 15:48:07



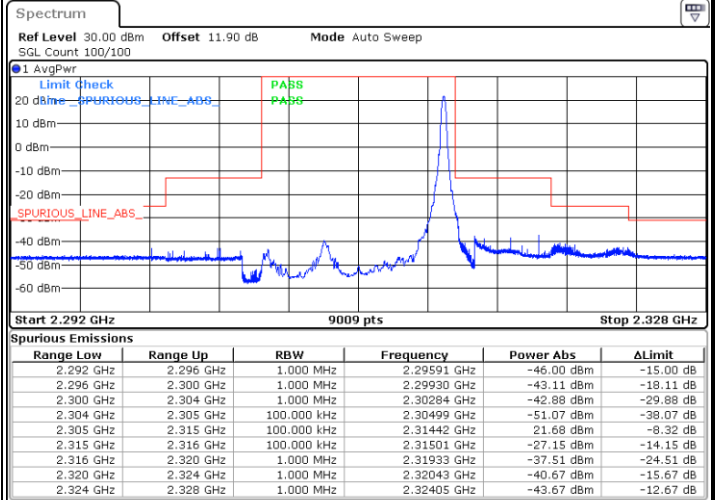
LTE Band 30 / 10MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

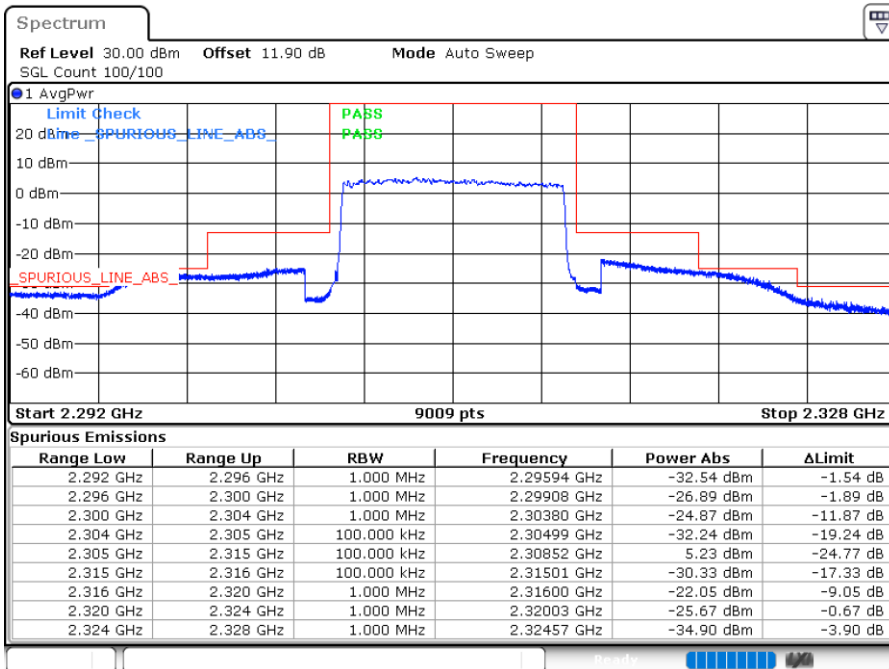


Date: 25.SEP.2020 16:39:21



Date: 25.SEP.2020 16:40:51

Band Edge / Full RB

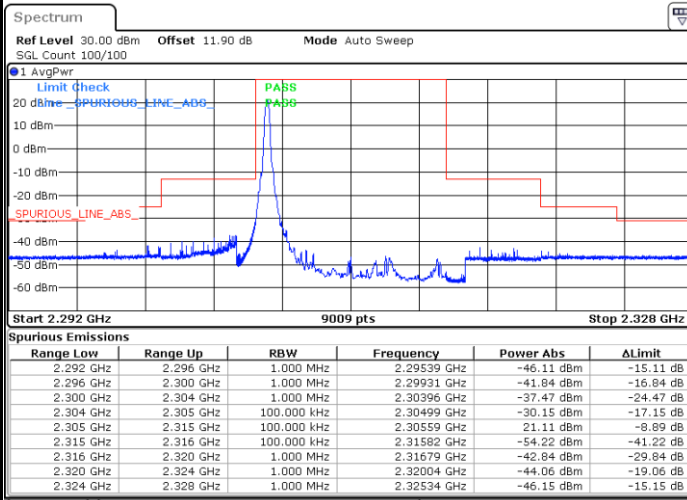


Date: 25.SEP.2020 16:42:21



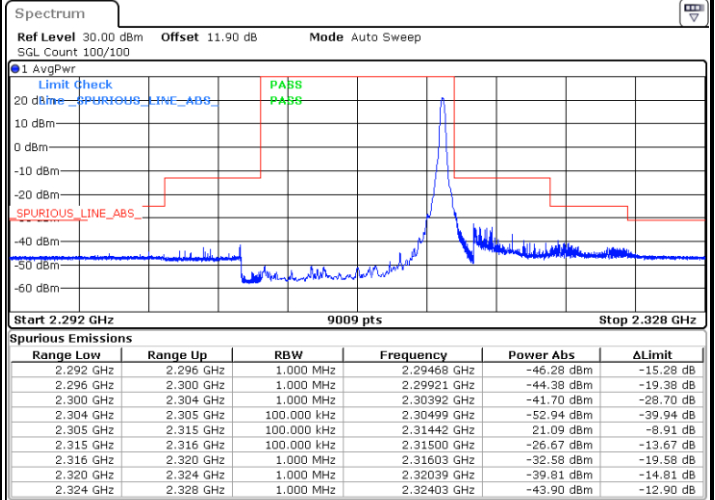
LTE Band 30 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



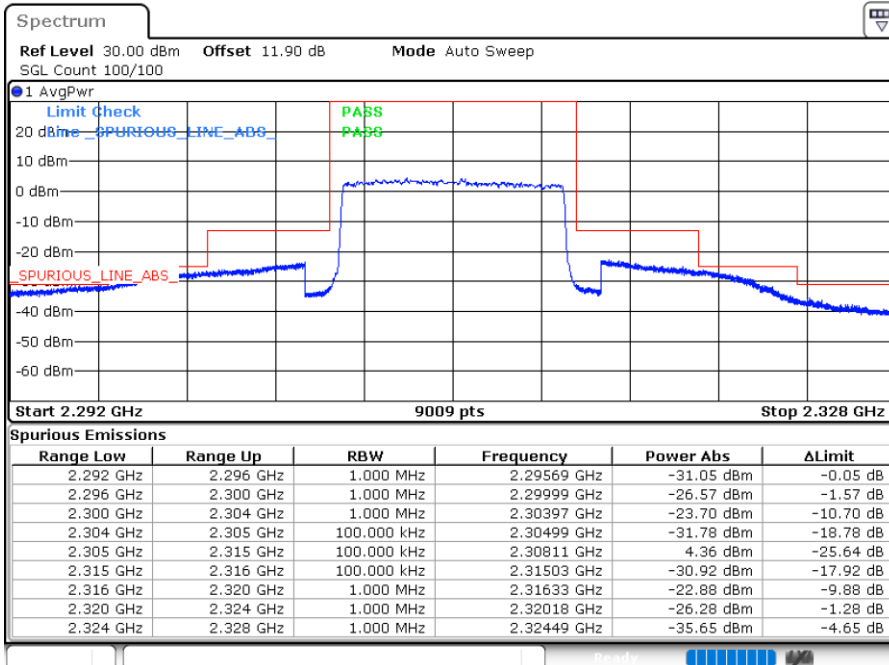
Date: 25.SEP.2020 16:39:51

Highest Band Edge / 1 RB



Date: 25.SEP.2020 16:41:20

Band Edge / Full RB

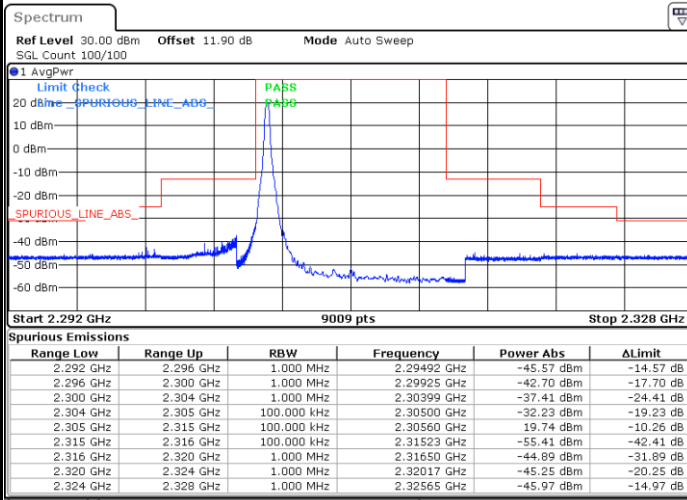


Date: 25.SEP.2020 16:42:50



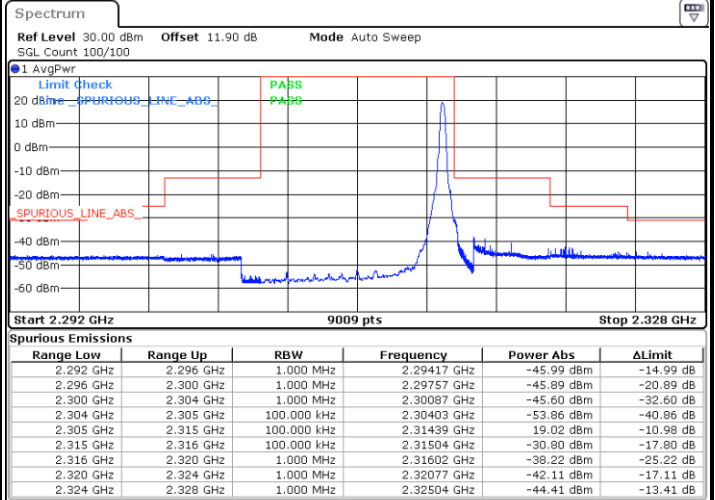
LTE Band 30 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



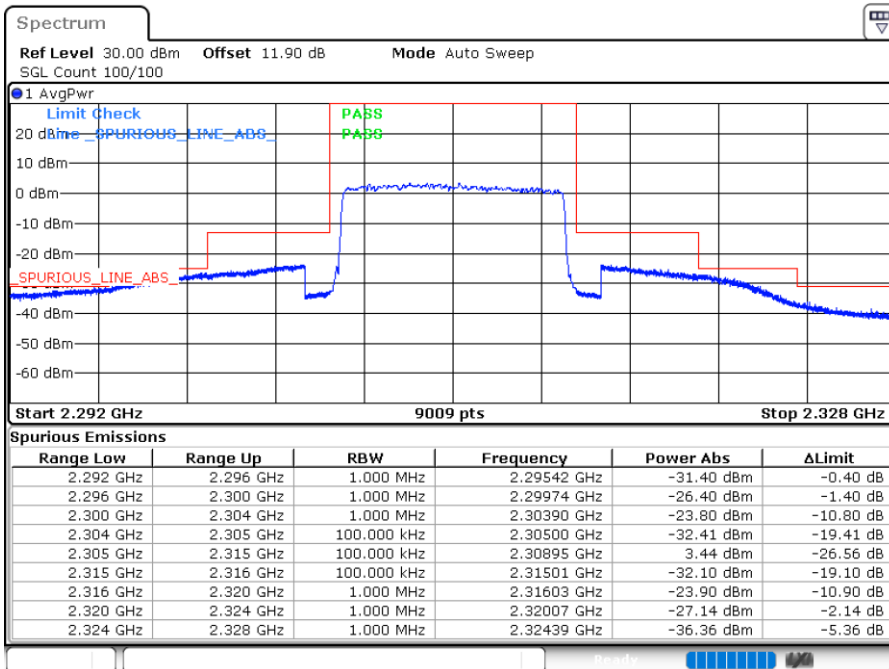
Date: 25.SEP.2020 16:40:21

Highest Band Edge / 1 RB



Date: 25.SEP.2020 16:41:50

Band Edge / Full RB



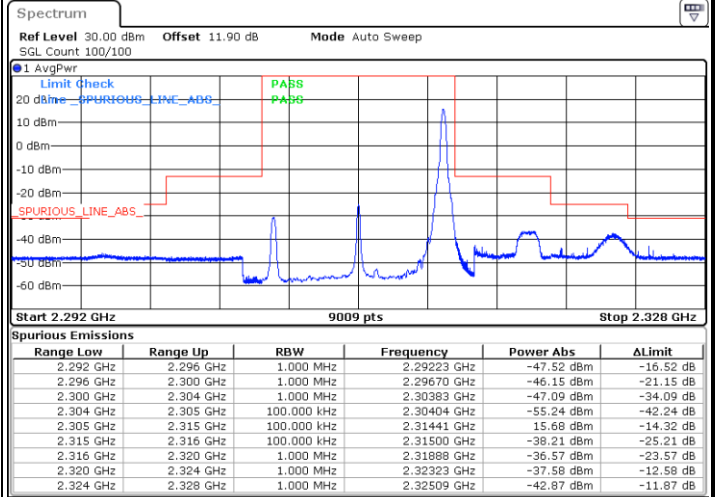
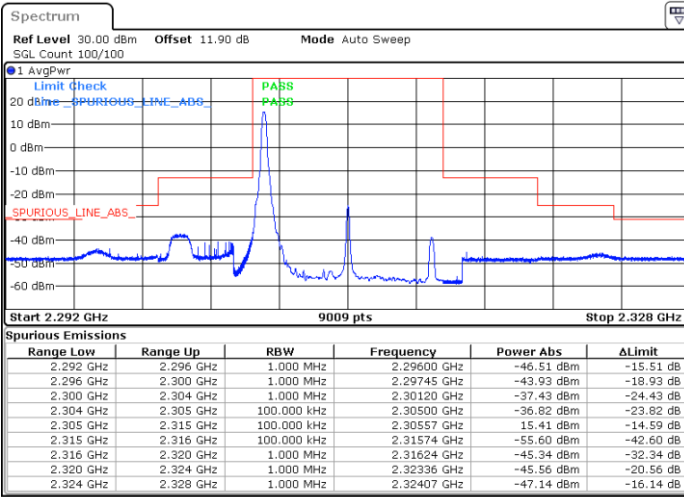
Date: 25.SEP.2020 16:43:20



LTE Band 30 / 10MHz / 256QAM

Lowest Band Edge / 1 RB

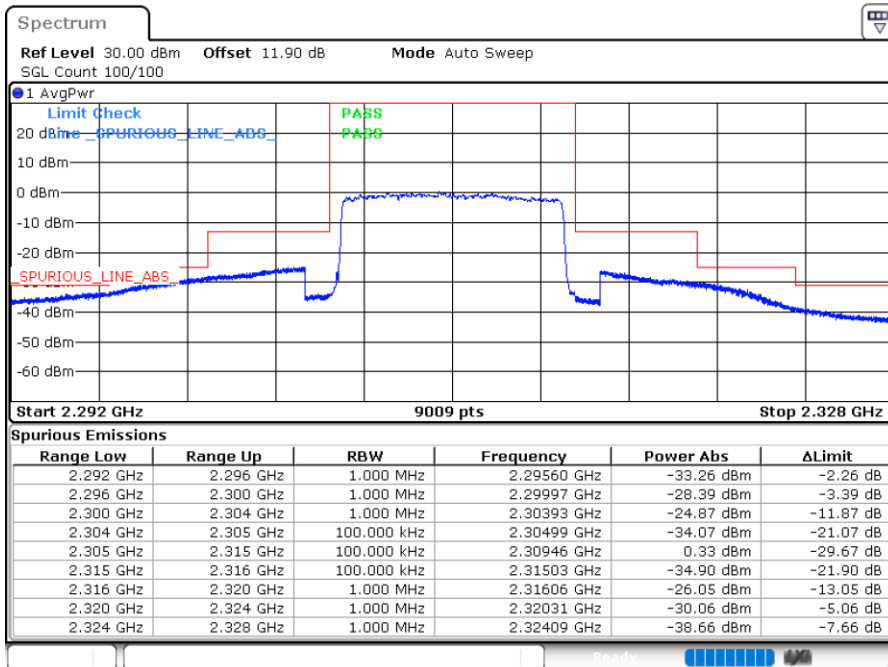
Highest Band Edge / 1 RB



Date: 28.SEP.2020 15:53:09

Date: 28.SEP.2020 15:53:31

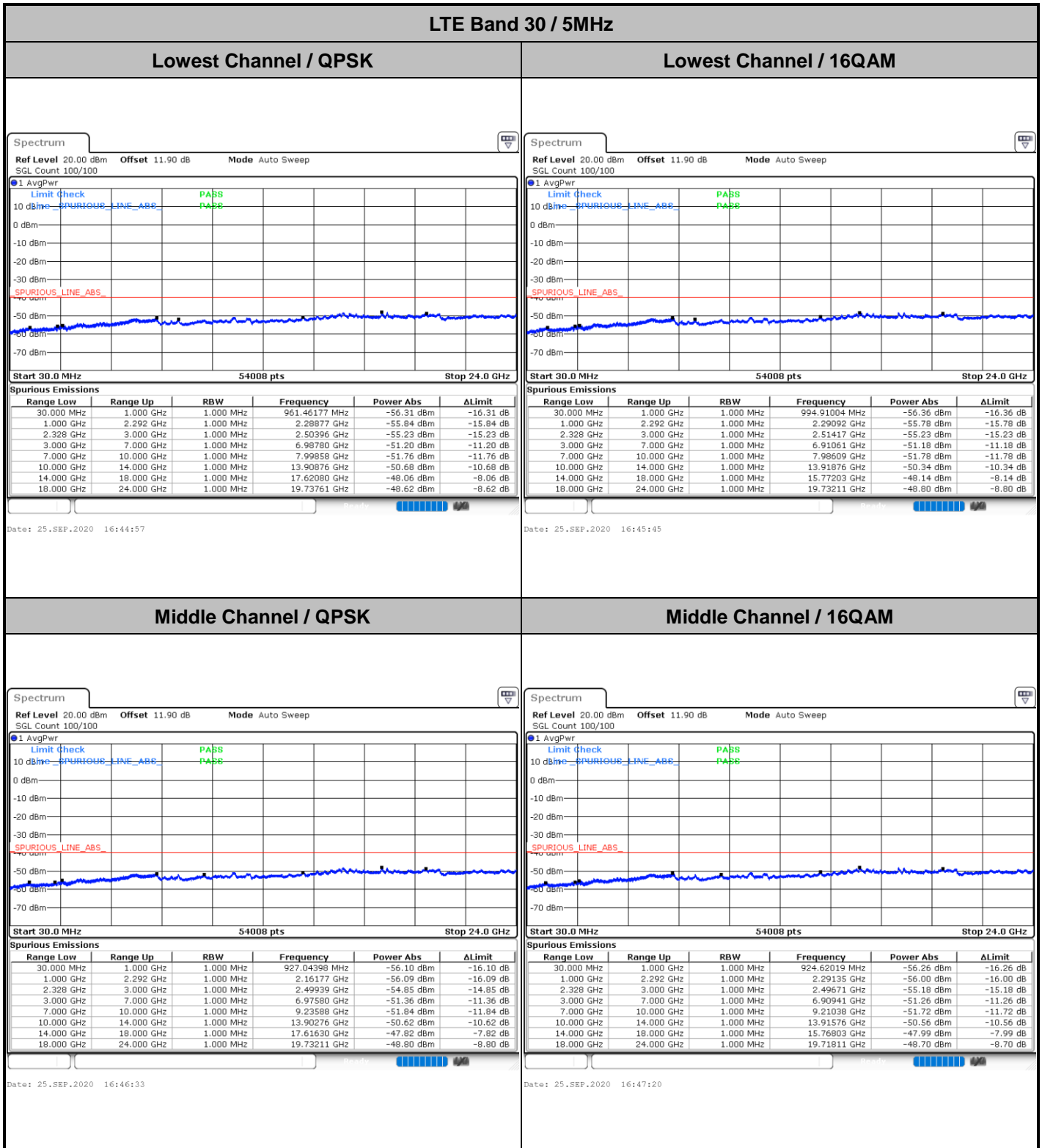
Band Edge / Full RB



Date: 28.SEP.2020 15:51:11



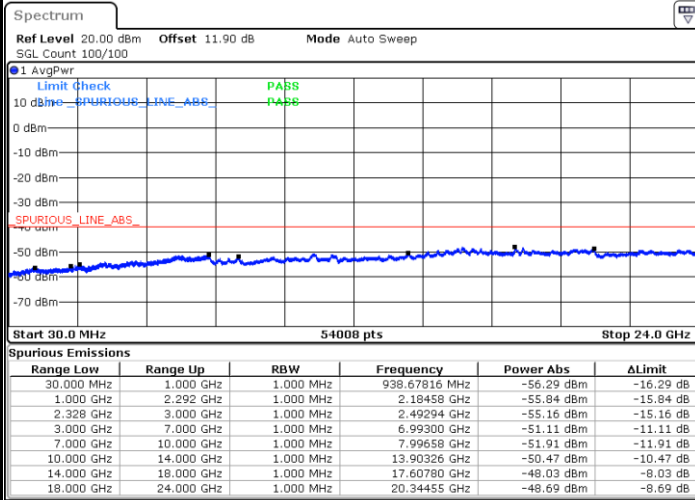
Conducted Spurious Emission





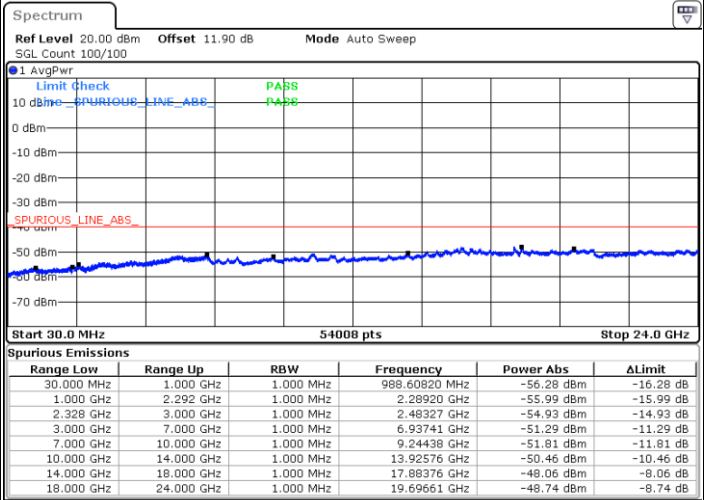
LTE Band 30 / 5MHz

Highest Channel / QPSK



Date: 25.SEP.2020 16:48:08

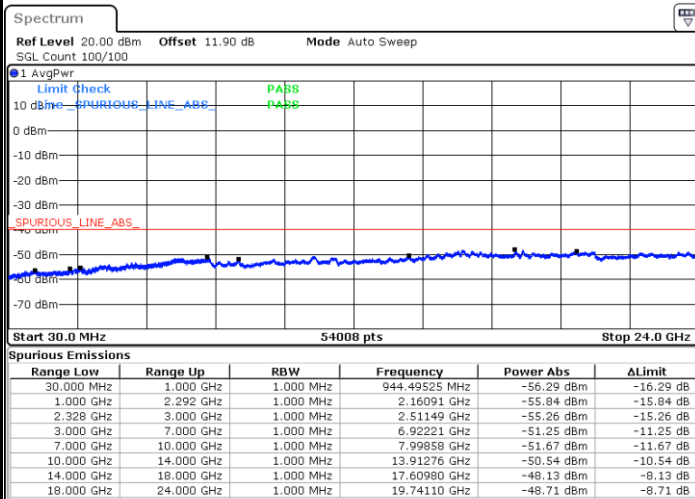
Highest Channel / 16QAM



Date: 25.SEP.2020 16:48:56

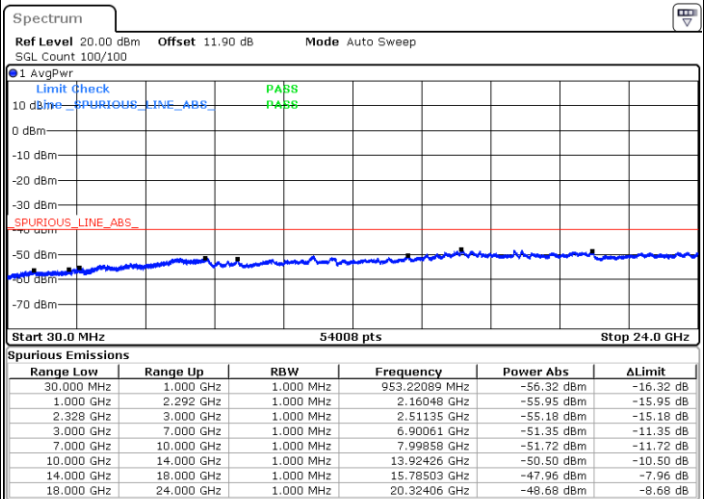
LTE Band 30 / 10MHz

Middle Channel / QPSK



Date: 25.SEP.2020 16:52:56

Middle Channel / 16QAM



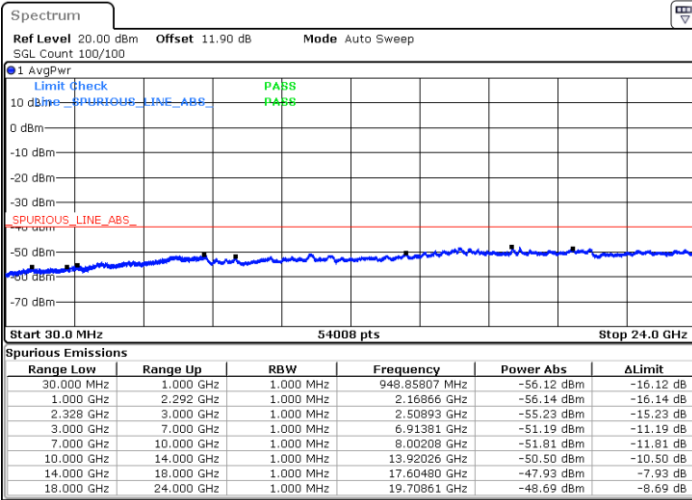
Date: 25.SEP.2020 16:53:43



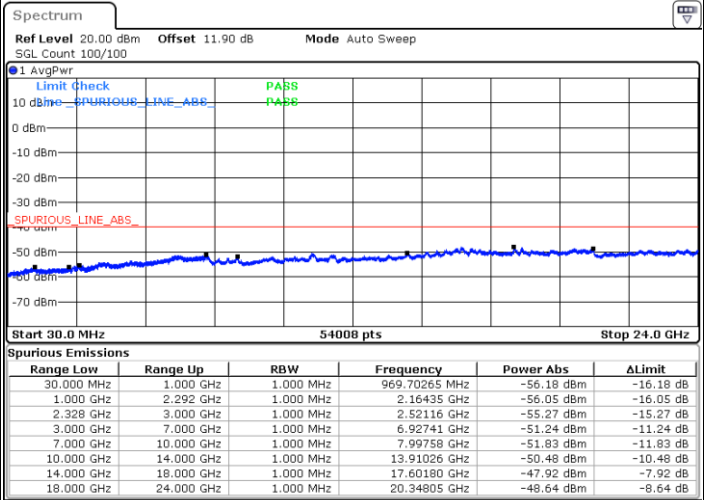
LTE Band 30 / 5MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

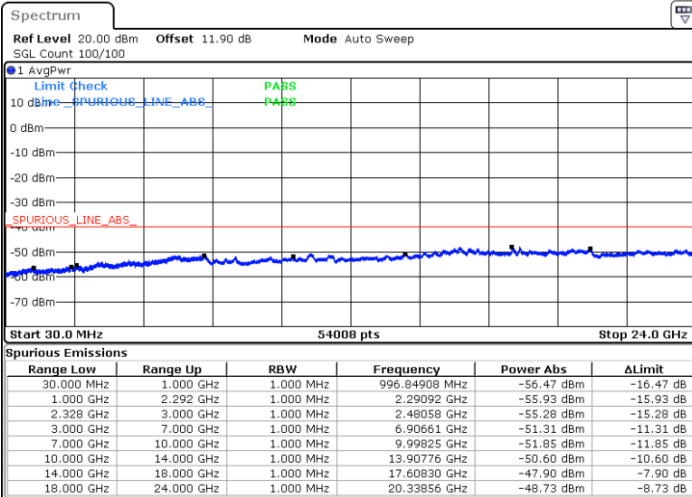


Date: 25.SEP.2020 16:49:44



Date: 25.SEP.2020 16:50:32

Highest Channel / 64QAM



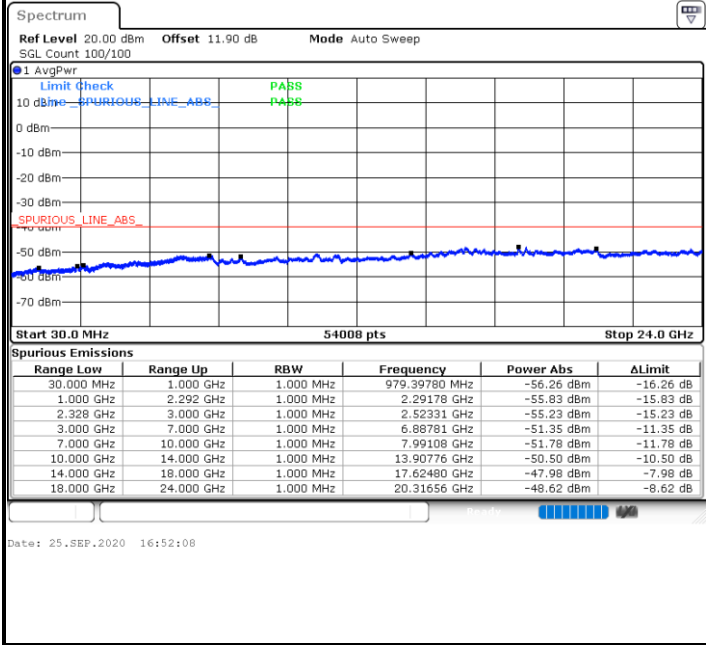
Date: 25.SEP.2020 16:51:20





LTE Band 30 / 10MHz

Middle Channel / 64QAM

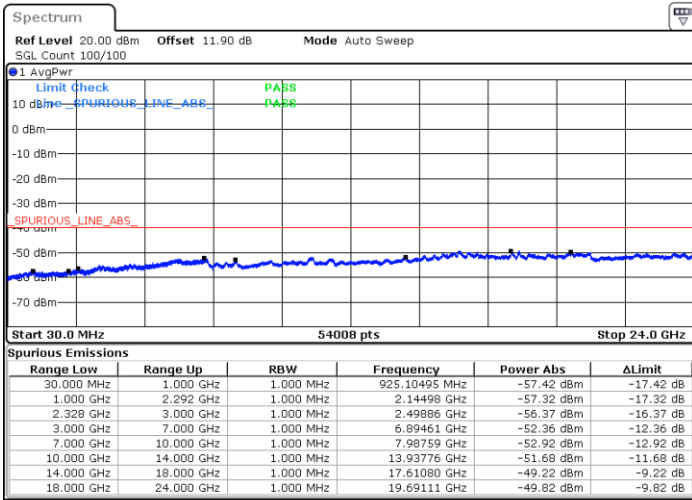




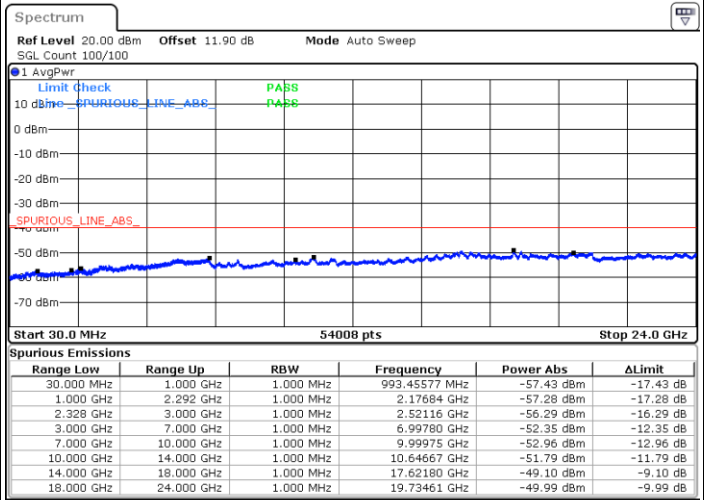
LTE Band 30 / 5MHz

Lowest Channel / 256QAM

Middle Channel / 256QAM

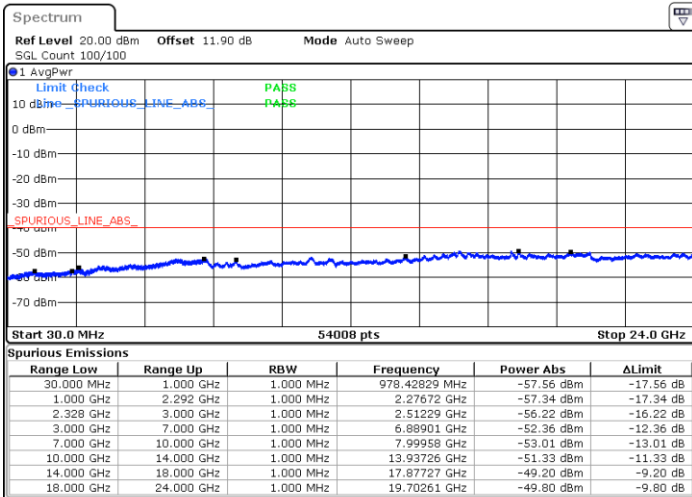


Date: 28.SEP.2020 15:46:57



Date: 28.SEP.2020 15:14:52

Highest Channel / 256QAM

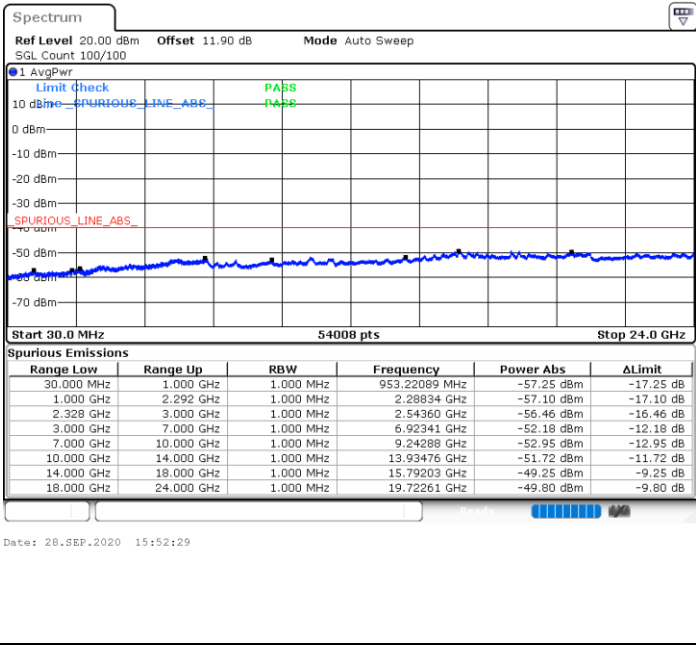


Date: 28.SEP.2020 15:49:25



LTE Band 30 / 10MHz

Middle Channel / 256QAM





Frequency Stability

Test Conditions		LTE Band 30 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0003	PASS
40	Normal Voltage	0.0085	
30	Normal Voltage	0.0001	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0003	
0	Normal Voltage	0.0005	
-10	Normal Voltage	0.0087	
-20	Normal Voltage	0.0011	
-30	Normal Voltage	0.0010	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0084	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.3 V. ; Maximum Voltage =4.25 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## Appendix B. Test Results of EIRP and Radiated Test

### EIRP

<Reporting Only>

LTE Band 30 / 5MHz (Average) (GT - LC = -0.6 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	12	23.84	0.2421	23.24	0.2109
Middle		1	12	23.93	0.2472	23.33	0.2153
Highest		1	12	23.87	0.2438	23.27	0.2123
Lowest	16QAM	1	0	23.22	0.2099	22.62	0.1828
Middle		1	0	23.28	0.2128	22.68	0.1854
Highest		1	0	23.18	0.2080	22.58	0.1811
Lowest	64QAM	1	0	21.68	0.1472	21.08	0.1282
Middle		1	0	21.80	0.1514	21.20	0.1318
Highest		1	0	22.21	0.1663	21.61	0.1449
Lowest	256QAM	1	12	18.61	0.0726	18.01	0.0632
Middle		1	12	18.64	0.0731	18.04	0.0637
Highest		1	12	19.05	0.0804	18.45	0.0700

LTE Band 30 / 10MHz (Average) (GT - LC = -0.6 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	-	-	-	-	-	-
Middle		1	0	23.93	0.2472	23.33	0.2153
Highest		-	-	-	-	-	-
Lowest	16QAM	-	-	-	-	-	-
Middle		1	49	23.30	0.2138	22.70	0.1862
Highest		-	-	-	-	-	-
Lowest	64QAM	-	-	-	-	-	-
Middle		1	49	22.05	0.1603	21.45	0.1396
Highest		-	-	-	-	-	-
Lowest	256QAM	-	-	-	-	-	-
Middle		1	25	19.03	0.0800	18.43	0.0697
Highest		-	-	-	-	-	-



**Radiated Spurious Emission**

**LTE Band 30**

LTE Band 30 / 5MHz / QPSK									
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	4608	-59.31	-40	-19.31	-52.81	-70.54	1.45	12.68	H
	6918	-59.67	-40	-19.67	-59.91	-69.95	1.73	12.01	H
	9225	-59.37	-40	-19.37	-62.21	-68.99	2.16	11.78	H
									H
									H
									H
	4608	-57.70	-40	-17.70	-50.41	-68.93	1.45	12.68	V
	6918	-58.86	-40	-18.86	-58.66	-69.14	1.73	12.01	V
	9225	-58.15	-40	-18.15	-61.99	-67.77	2.16	11.78	V
									V
									V
									V
Middle	4614	-61.62	-40	-21.62	-55.13	-72.84	1.46	12.68	H
	6924	-59.35	-40	-19.35	-59.64	-69.63	1.73	12.01	H
	9234	-59.28	-40	-19.28	-62.11	-68.89	2.16	11.77	H
									H
									H
									H
	4614	-60.65	-40	-20.65	-53.39	-71.87	1.46	12.68	V
	6924	-59.51	-40	-19.51	-59.35	-69.79	1.73	12.01	V
	9234	-57.80	-40	-17.80	-61.64	-67.41	2.16	11.77	V
									V
									V
									V



Highest	4620	-61.09	-40	-21.09	-54.63	-72.31	1.46	12.68	H
	6930	-59.60	-40	-19.60	-59.97	-69.87	1.73	12.00	H
	9243	-59.36	-40	-19.36	-62.16	-68.95	2.16	11.76	H
									H
									H
									H
	4620	-60.02	-40	-20.02	-52.79	-71.24	1.46	12.68	V
	6930	-59.53	-40	-19.53	-59.41	-69.80	1.73	12.00	V
	9243	-58.03	-40	-18.03	-61.86	-67.62	2.16	11.76	V
									V
									V
									V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



LTE Band 30 / 10MHz / QPSK									
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	4614	-59.25	-40	-19.25	-52.76	-70.47	1.46	12.68	H
	6918	-59.39	-40	-19.39	-59.63	-69.67	1.73	12.01	H
	9225	-58.92	-40	-18.92	-61.76	-68.54	2.16	11.78	H
									H
									H
									H
	4614	-57.05	-40	-17.05	-49.79	-68.27	1.46	12.68	V
	6918	-59.16	-40	-19.16	-58.96	-69.44	1.73	12.01	V
	9225	-58.34	-40	-18.34	-62.18	-67.96	2.16	11.78	V
									V
									V
									V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.